CDIAC Web Site Update

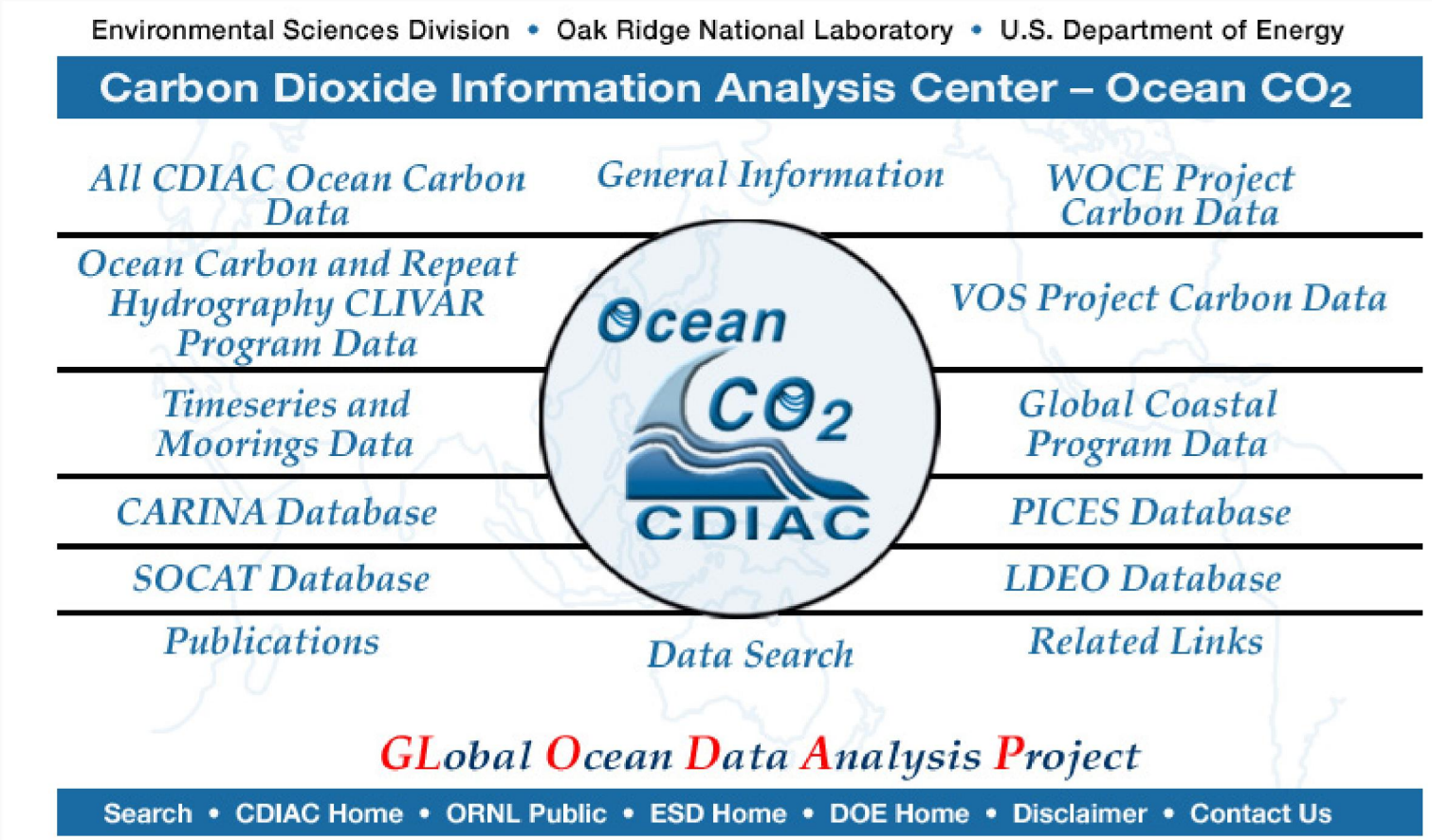
Fred Baes

CDIAC User Working Group Meeting
September 27-28, 2010

Overview

- “Oceans” revisions
- Feedback from the public
- Final thoughts

Revisions to "Oceans"



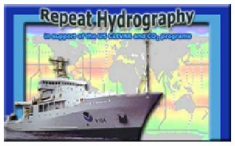
Oceans Design Issues

- Looked “Old”
- Inconsistent navigation & design
- Non-standard, often invalid HTML
  - Large number of contributors over the years
  - HTML Exported from Microsoft Word
- Greek, math & special symbols rendered with graphics or “lost”
- Large graphs and tables

Example Oceans Page

Ocean CO_2 CDIAC

Carbon Dioxide Information Analysis Center
Environmental Sciences Division
Oak Ridge National Laboratory
U.S. Department of Energy



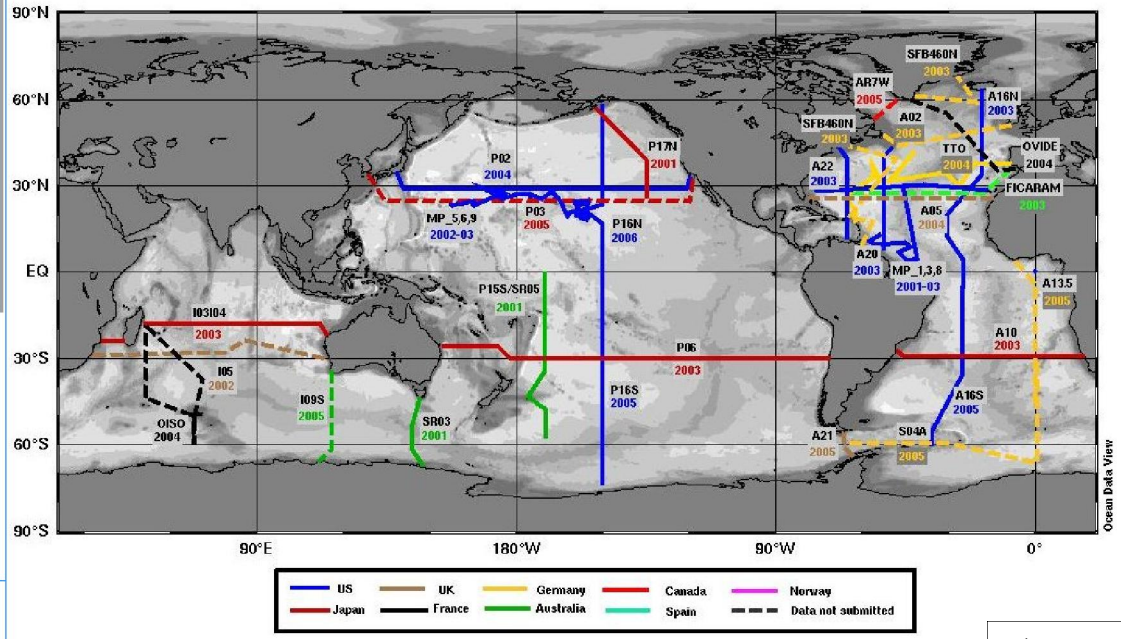
- Repeat Hydrography Global Map
- Introduction
- CDIAC/WHPO (CCHDO) Data Management Plan (PDF)
- Repeat Carbon Measurements Science Team
- U.S. Repeat Hydrography Program Office
- Program Links
- CDIAC Ocean Home
- GLODAP Data
- *Mercury* Search
- *WAVES* Search

Data Management Support for the International Global Ocean Carbon and Repeat Hydrography Program

See a Table of the Repeat Hydrography Program Data Status
For on-going and planned cruise information see IOCCP Repeat Hydrography Carbon Map

Map of Completed International Repeat Hydrography Program Sections **(Note: dashed lines indicate that the data have not been submitted to CDIAC at this time)**

Click on section for cruise information and data!



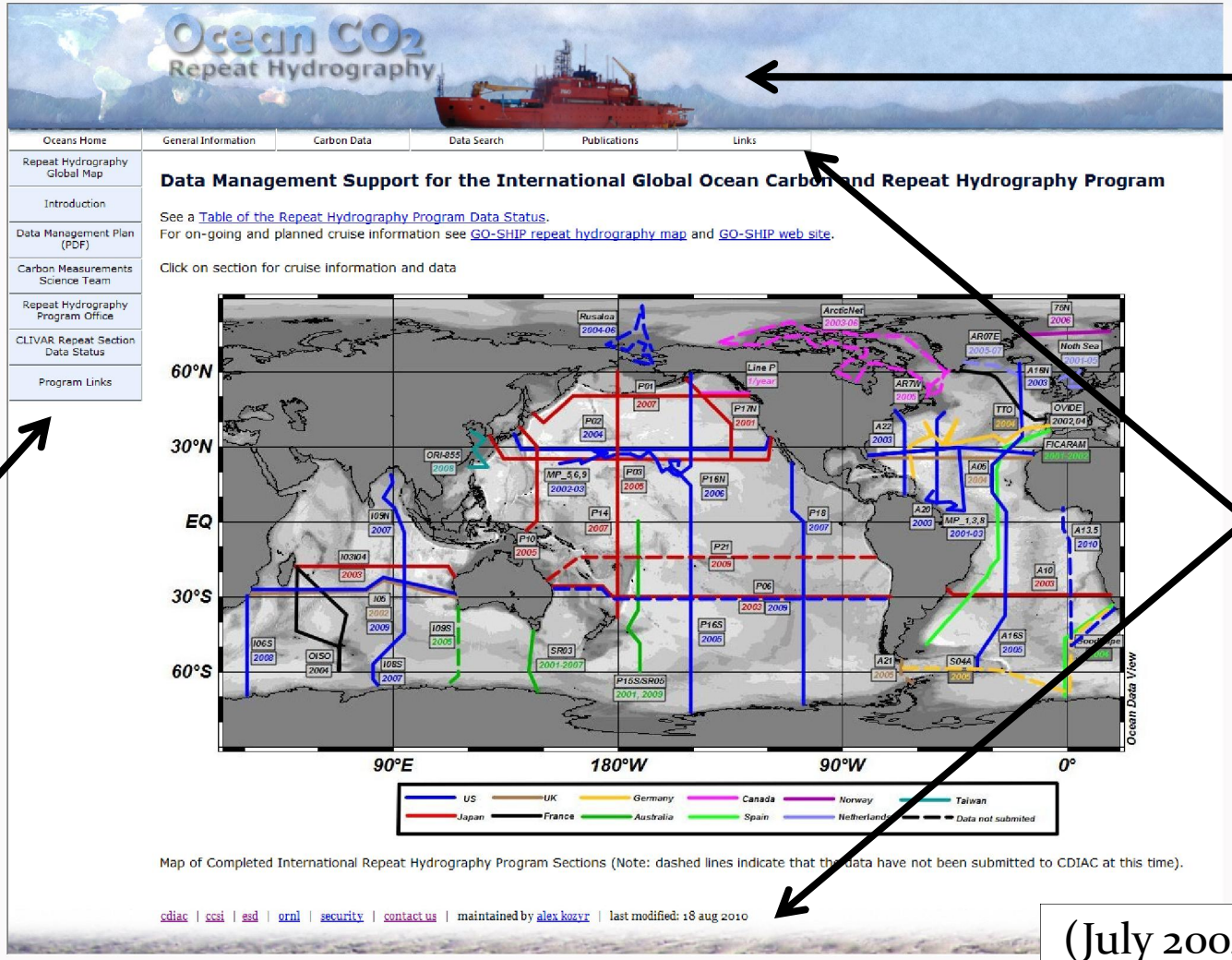
(July 2002)

Oceans Makeover

Over 1800 HTML files revised

- Scripts written & run to address common HTML issues (e.g., improper nesting)
- "HTML Tidy" fixed some problems (e.g., font declarations, missing tags, etc.)
- "Missing" special characters (e.g., °, µ, ±, d, etc.) were identified & fixed
- Some images were cropped or resized (in some cases regenerated)
- Ultimately every file had to be edited by hand

Revised Oceans Page



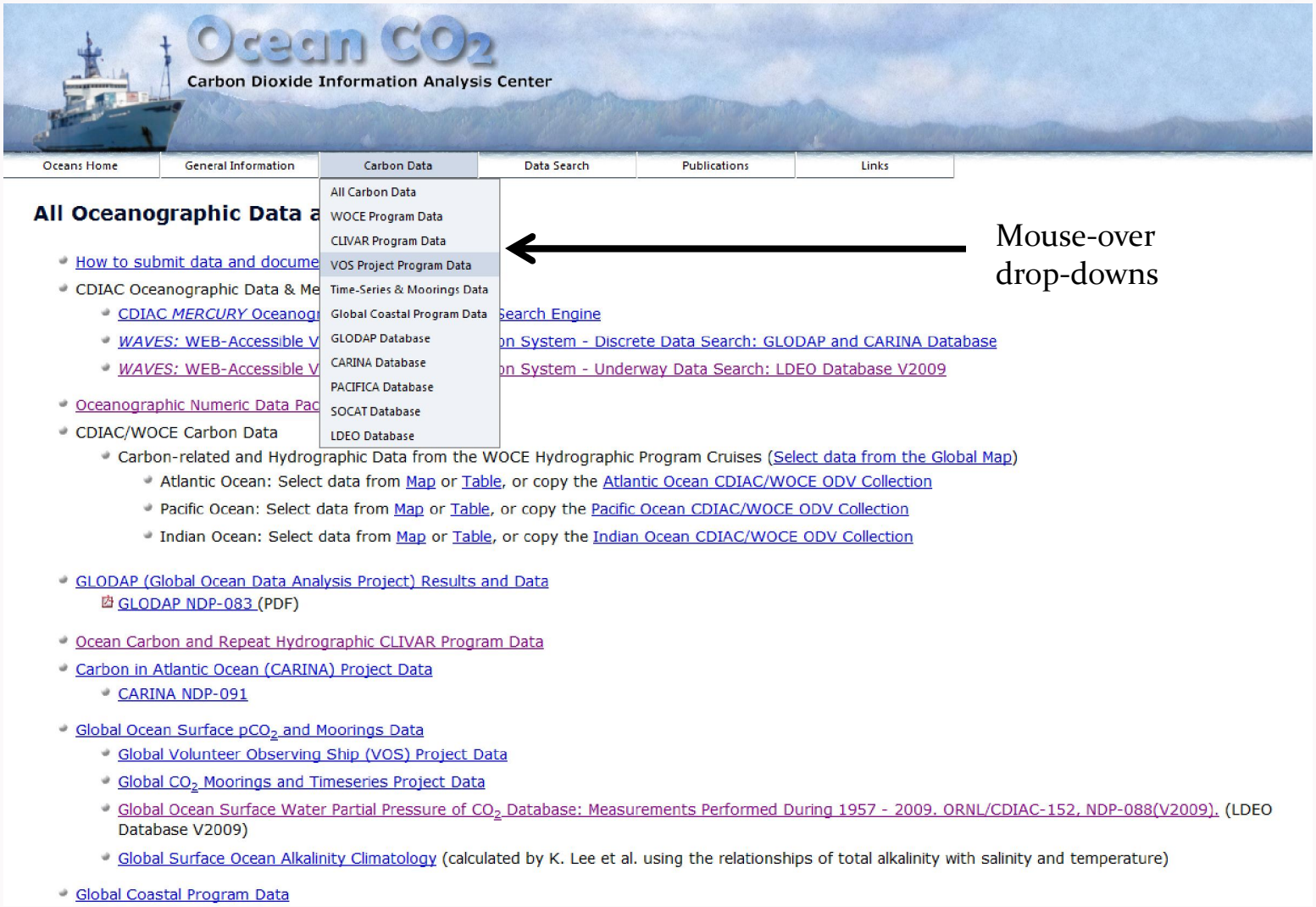
Common Header graphic

Global navigation

"Local" navigation (if needed)

(July 2002)

Oceans Top Navigation



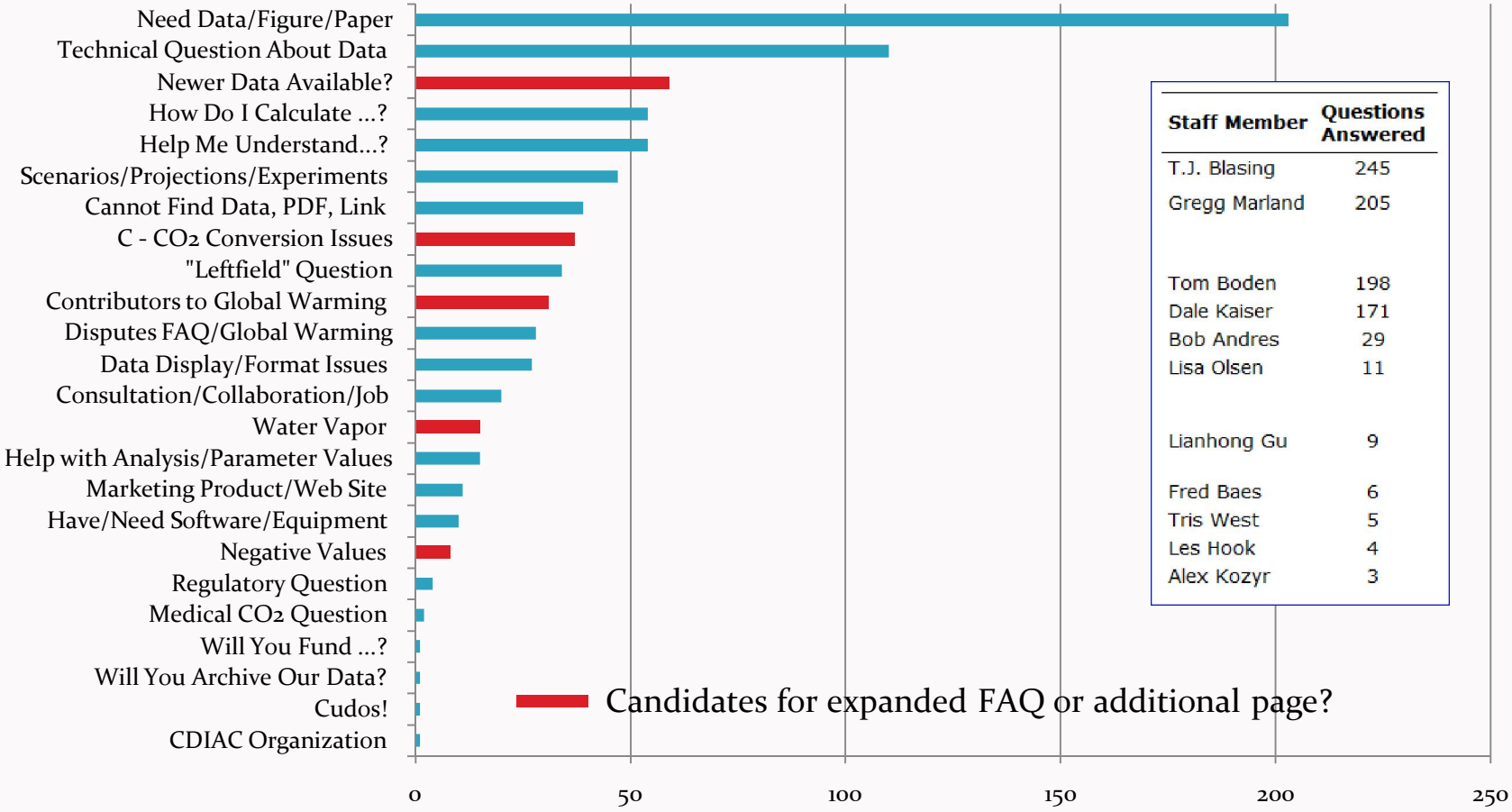
Mouse-over drop-downs

Thoughts on Oceans Makeover

- "RCS" file management is cumbersome
- Tool or software for adding/editing HTML needed
  - Allow investigators to create consistent & valid HTML
  - Different styles & levels of expertise with HTML can create "patchwork" look
  - Many content management systems available (e.g., Drupal, Joomla, WordPress, MODx, etc.)
- Need better quality figures
- Need better approach to management (or removal) of out-of-date pages

Questions/Comments

1/26/07 - 9/20/10



Staff Member	Questions Answered
T.J. Blasing	245
Gregg Marland	205
Tom Boden	198
Dale Kaiser	171
Bob Andres	29
Lisa Olsen	11
Lianhong Gu	9
Fred Baes	6
Tris West	5
Les Hook	4
Alex Kozyr	3

A Good Question

Technical Question About Data

Q

I downloaded the CO_2-emission data of nearly all countries in the world, calculating the remaining countries as the difference between the regional totals and the bigger countries I downloaded individually. However, adding up all countries and the emissions from groups of remaining countries, I was left with a difference with the global total emission data. The global difference I found, seemed to correspond with the emission data of bunker fuels. Bunker fuels are mentioned separately in the national emission data, but are absent in the regional and global emission data. After some test-calculations, I came to the conclusion that, although bunker fuels are not included in the regional emission data, they are included in the totals of the global emission data. My question is if you can confirm this? Kind regards, Hans

A

You have figured it out correctly. Counties are calculated individually, regions are the sum of countries, the global total is calculated separately. The global total actually differs from the sum of countries for 4 reasons, the most important of which is that bunker fuels are not included with any country. It is also true that globally the sum of imports of any given fuel is seldom exactly the same as the sum of exports for the same fuel, our estimates of the extent to which non-fuel uses (asphalt, lubricants, solvents, etc.) of fuels are oxidized to CO_2 is done differently for countries and for the global total, and there are differences in which way countries treat the change in stocks (the amount of coal in piles at power plants, etc.). As you noted, bunker fuels is the dominant component, but you will still not get an exact match. Good show, Gregg

[Hans replies…] Thanks for the confirmation (and the compliment) Gregg, A suggestion as a feed-back: Wouldn't it be more consistent to specify bunker fuels on all levels: nationally, regionally and globally? The other three reasons you mention, are not very significant indeed (I noticed the not-100% match, but they were an order or two less in magnitude compared to bunker fuels), so adding them to 'bunker fuels' and explaining them in a footnote would be sufficient. Kind regards, Hans

Some "Bad" Questions

Questions out of "Left Field"

Q **Why is carbon dioxide a gas?**

A Dear Rhianon Freedo, We appreciate your question to the CDIAC Web site. Like other molecules, CO2 has temperatures at which it changes state from solid to liquid to gas. It just turns out that at normal atmospheric pressure, CO_2 gas will change to a solid at -78C. See: http://www.ilpi.com/msds/ref/carbondioxide.html . Sincerely, CDIAC

Q **What a bunch of shit. Who's paying for this data?**

A Dear Karen, Our data center is supported by the U.S. Department of Energy. The research and monitoring data we archive and make available were supported by numerous national and international agencies, ministries, universities, foundations, etc. (e.g., NASA, USDA, NSF, EU). Any particular data at our center or absent from our center that drew your ire? Sincerely, Tom Boden Carbon Dioxide Information Analysis Center Oak Ridge National Laboratory

Q **Would dyeing carbon dioxide gas to a lighter color keep earth's troposphere from capturing as many heat rays, like the difference between blacktop asphalt and other light-colored heat-reflecting surfaces?**

A Carbon dioxide is a colorless, odorless gas that just happens to absorb heat radiation. You might think of heating water in a microwave oven as an similar process. Microwaves will heat anything that has water in it. Gregg

Carbon vs. CO_2 in FAQ

CDIAC

Carbon Dioxide Information Analysis Center • http://cdiac.ornl.gov

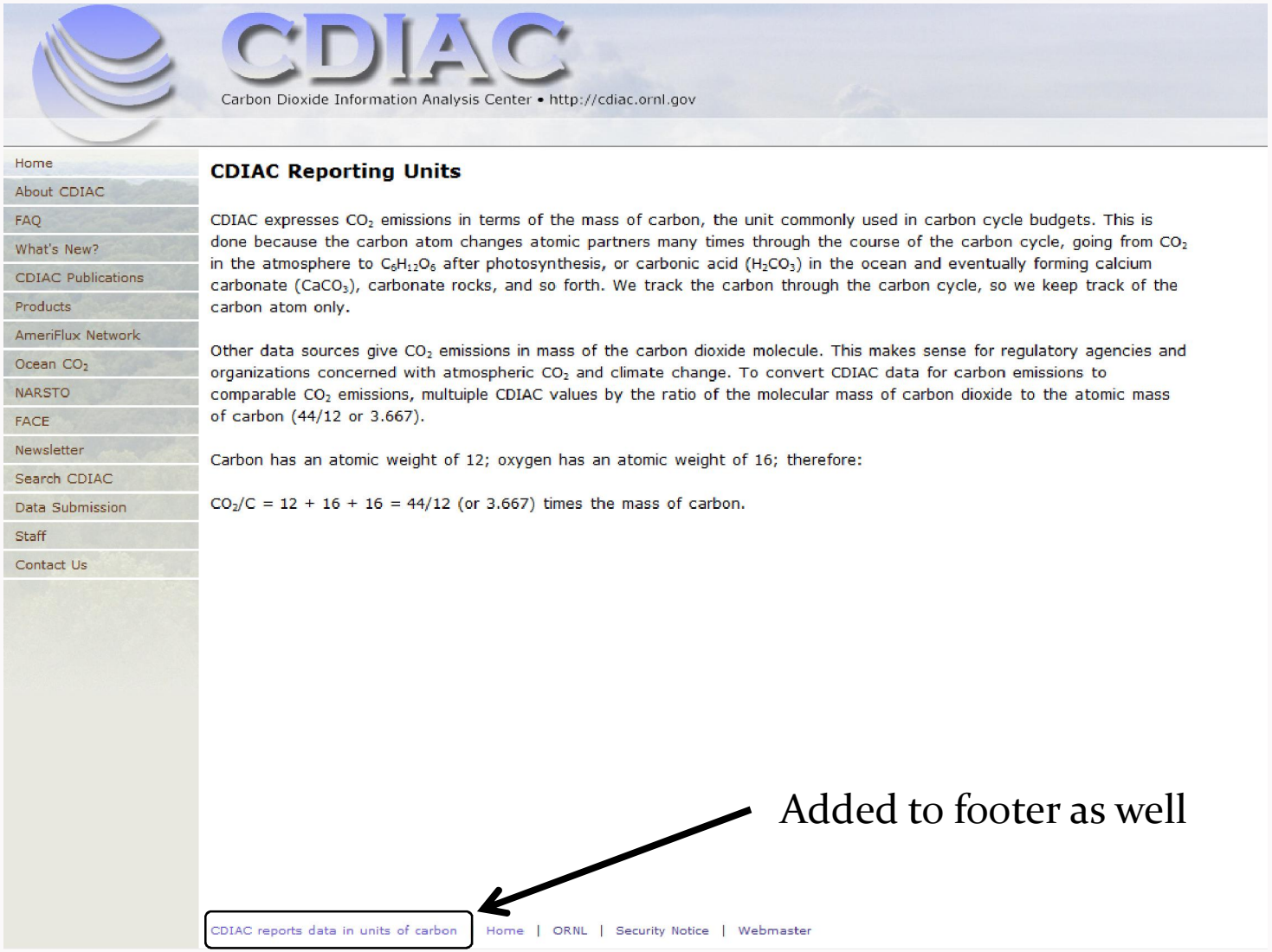
Frequently Asked Global Change Questions

This page lists global change questions that have been received at CDIAC and the answers that were provided to a diverse audience. If you have a question relating to carbon dioxide and global change and cannot find the answer you need here, you can "Ask Us a Question", and we will be glad to try to help you.

Questions

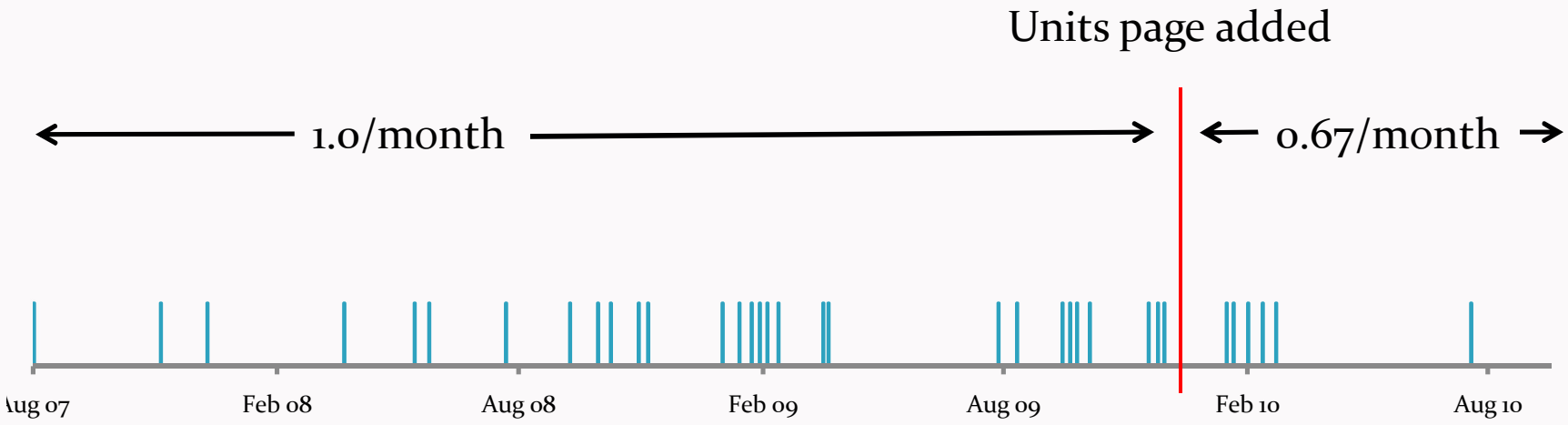
1. Should we grow trees to remove carbon in the atmosphere?
2. What are the present tropospheric concentrations, global warming potentials (100 year time horizon), and atmospheric lifetimes of CO_2, CH_4, N_2O, CFC-11, CFC-12, CFC-113, CCl_4, methyl chloroform, HCFC-22, sulphur hexafluoride, trifluoromethyl sulphur pentafluoride, perfluoroethane, and surface ozone?
3. Where can I find information on the naming of halocarbons?
4. Can you quantify the sources and sinks of the global carbon cycle?
5. How much carbon is stored in the different ecosystems?
6. In terms of mass, how much carbon does 1 part per million by volume of atmospheric CO_2 represent?
7. What percentage of the CO_2 in the atmosphere has been produced by human beings through the burning of fossil fuels?
8. How much carbon dioxide is produced from the combustion of 1000 cubic feet of natural gas?
9. Why do some estimates of CO_2 emissions seem to be about 3 1/2 times as large as others?
10. Why is the sum of all national and regional CO_2 emission estimates less than the global totals?
11. Why do some smaller nations have larger per capita emission estimates than industrialized nations like the US?

"Units" Page Added



Did It Help?

- Rate of "units" question reoccurrence has declined (but people still do not read carefully)



"Permissions" Added to FAQ

Q **I would like to use a diagram, image, graph, table, or other materials from the CDIAC Web site. How can I obtain permission? Are there copyright restrictions?**

A All of the reports, graphics, data, and other information on the CDIAC Web site are freely and publicly available without copyright restrictions. However as a professional courtesy, we ask that the original data source be acknowledged. Suggested citations appear at the bottom of the Web page for each data set. If the citation is unclear, simply contact CDIAC through our Web form. Please identify the URL of the Web page in which the information or graphic appears.

If questions continue to come in we may need a page addressing permissions, Copyright & citations.

Thoughts on Comments

- Recurrent questions show need for expanded FAQs or new pages
  - Carbon vs. CO_2 units issues
  - Statement on time delay in posting data sets?
  - Permission to use figures & data
  - Negative values
  - Water vapor
  - Contributors to atmospheric CO_2 (e.g., volcanoes)
- Need for better quality figures
  - Many requests to use figures in books, articles, Web sites
  - High resolution/quality figures with CDIAC logo & citation would enhance CDIAC "brand" and insure proper recognition
- Need for better organization of data sets
- Grammar, spelling, punctuation is on the decline in the Internet age

Some Final Thoughts

- How can we make it easier to find data sets?
  - Search function improved but users often resort to submitting requests through feedback form
  - Would a master list of data sets help?
  - Reorganization?
- Can we reduce reoccurrence of some questions?
  - Real-time FAQ?
  - More buttons & links?
  - Put Q&A archive on-line? (after sanitation)
- Can we manage the content better?
  - Content management system?
  - Graphics software for high-quality figures & graphs?